

## NATIONAL SECURITY

## НАЦІОНАЛЬНА БЕЗПЕКА


**CITY PLANNING ENDANGERING  
THE SECURITY OF THE NATIONAL  
FINNISH NAVY HEADQUARTER –  
THE ENEMY WITHIN\***

The role of TBI with an emphasis in Bloodstain Pattern  
Analysis and Crime Scene Reconstruction

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*“In peace prepare for war, in war prepare for peace. The art of war is of vital importance to the state. It is matter of life and death, a road either to safety or to ruin. Hence under no circumstances can it be neglected.*

*Sunzi, around 500 BC*

*“The game of strategy can, like music, be played in two keys. The major key is direct strategy, in which force is the essential factor. The minor key is indirect strategy, in which force recedes into the background and its place is taken by psychology and planning.”*

*André Beaufre*

**Abstract**

National security plays an important role in the defense of the state and the stability of the development of the region. National security should be treated with particular attention at a time when a complex and bloody war, unprovoked large-scale aggression against the victim country is taking place in Europe. Therefore, one cannot calmly observe when individual actions against the National Security of a state neighbor of the aggressor are allowed.

This article describes the threat, which currently endangers the Finnish National Navy Headquarter in the city of Turku. On an analytical basis it describes standards of equivalent army zone protection and the danger, which is hidden behind the project Pihlajaniemi in Turku, Finland.

**Key words.** National security, international security, Finnish National Navy Headquarter, city planning.

\* Планування міста, що ставить під загрозу безпеку Національного штабу ВМС Фінляндії – ворог всередині.

\*\* Доктор медицини, призначений і присяжний експерт з аналізу плям крові та реконструкції місця злочину, Інститут плям крові Узінген (Німеччина).

## 1. INTRODUCTION

Resilience is the ability to react flexible towards unforeseen situations, as war is one. In times of war everything changes fast and security becomes a basic need. Contrary to times of peace, when security seems to be natural and is easily overseen in planning. As Carl von Clausewitz pictures: “In war everything is easy, but the easy things are difficult.“, („Es ist im Kriege alles sehr einfach, aber das Einfachste ist schwierig“, – Vom Kriege, 1. Buch, 7. Kapitel). The protection of army structures in times of peace, the planning of their ability to react in times of crises and the protection of civilians, these are the topics of this article.

Security is an act of planning in many ways. And it just cannot simply be bought, as nowadays news items seem to constitute, depicting politicians buying weapon systems.

This article describes the threat, which currently endangers the Finnish national Navy Headquarter in the city of Turku. On an analytical basis it describes standards of equivalent army zone protection and the danger, which is hidden behind the project Pihlajaniemi in Turku, Finland.

## 2. ANALYTICAL OVERVIEW OF RELEVANT FACTORS

Although the standards are usually not published due to security reasons, an overview

can be provided by an analysis of current and equivalent army zones. This article covers especially national navy headquarters. The security of a national navy headquarter is of the utmost importance for nations with a straight entry to sea. Over the centuries many wars were fought on sea and entries to sea remain until today an important factor for geopolitical approaches.

The following factors are based upon an analysis of current navy HQs and upon published material.

### 2.1. Drive ways

Military zones require a good connection to traffic and preferably not through city centers. Good connections to motorways are necessary for the times of crisis, when military traffic is increasing heavily together with the security levels. This is part of the planning, because the traffic is a key factor and it changes. The traffic changes in crisis are often drastically.

There are different concepts:

1. Many large connections with a fast distribution of traffic in the direct surrounding of the secured army zone. This can be seen in The Pentagon in Virginia, USA.

2. A mandatory driveway, which is easy to surveil and can be closed in times of attack as can be seen in Muskö island, Sweden or Whale Island, GB.

If an area is equipped with a mandatory drive way, the same protection standards as for the army zone should be applied to the mandatory part of the street, ensuring the traffic.

Often it is underestimated how traffic might change between times of peace and times of war. Logistics and transport contingents are rising drastically together with a rise of security level.

The traffic planning therefore cannot be done on the basis of civilian wishes or on the traffic according to the existing situation. It needs to be kept clear and based upon the needs in time of crisis. All paths into the area should remain easy to close for civilian traffic.

The task of the army is to defend the country in times of crises and not to chase parking offenders and to clear away e-scooters out of their driveway.

### 2.2. Surrounding

The surroundings are usually kept simple and flat. It has to be considered, that a fast evacuation might become necessary and therefore surrounding structures should not be higher than the army structures. Units which are located in the cities usually only have a few single family's home across a street and a security zone is established in the surrounding.

With any high building close by, the overview of the area is

lost and risks for spying, attacking and perpetrators remaining unseen, do increase drastically.

Additional most of army areas are equipped with NFZ (No fly zones) and also NFZs for UAV (unmanned aerial vehicle, commonly known as drones).

The simpler the surrounding is, the higher the security, the lower the risk for spying and attacking. A good overview needs to be planned actively and it also provides in times of attack a higher probability for the identification of the origin of an attack or the perpetrator self. Security zones around the army structure provide unattainability for low range rocket attacks.

### 2.3. Civilian protection

Not only are civilian buildings a risk for army zones, furthermore also army zones are a risk for civilian buildings.

Nowadays technology offers wide variations of missiles for attacks. The time, when only the enemy stood in front of the own soldiers is long gone and attacks also might happen from 1000 km away. Modern weapons technology offers different ranges for missiles, easily enlarged by being built as air to surface missile (ASM). Technological development over the past 80 years provided missiles of different speeds, different ranges, different flight heights and different steering abilities. When it comes to stee-

ring abilities, it has the same importance as does the range have. Missiles which fly based upon conventional ballistics are easier to calculate for missile defense systems, then missiles, which are able to change their paths controlled during flight.

According to the Rome Statute of the International Criminal Court it is possible to attack civilian structures in the surroundings of army zones. This being dependent to the rank of the structure. Therefore the surrounding of any national HQs cannot be considered a secure surrounding for civilian life.

#### **2.4. Terrorists attack protection**

Army zones do have a higher risk for attack not only in times war of, but also being an aim for terrorist attack in times of peace. This phenomena can be found worldwide and in all political systems. As earlier described the surrounding control is of primary importance. It has to be mentioned that often measures for terrorist's attack protection also provide espionage protection.

#### **2.5. Espionage protection**

It is not only the physical attack, which needs to be taken into consideration, but also espionage. Any high building in civilian use, increases the risk of espionage, in contrast to attacks, without physical destruc-

tion. The driveways provide information about amount, type and direction of military and civilian vehicles entering and exiting national army zones and often secondly also about weapons in use. Inside information from the army zone might provide inventory information, information of personal presence, information of planning and so on. Espionage is a highly critical danger to army forces. Both, mandatory driveways and army zones need to be secured against his type of danger.

Therefore a special emphasis has to be put on keeping in the direct surrounding traffic as low as possible until larger roads are reached by the zones traffic and the distribution into different directions add to the security. It is easier to hide enemies' movement, when persons of suspicion can hide in a large amount of close by traffic.

#### **2.6. Environmental protection**

Often military zones do also provide risks for the environment in the surrounding and are also often endangered by the buildings in their surroundings.

The later one is also connected to access. Military zones often have several types of access, e.g. for naval zones via land and sea. Especially in the naval context often caves are used as a strategic storage or hiding places for critical objects.

However, modern building often involves deep underground constructions, always e.g. associated with the building of high towering structures.

The geological risk for damaging caves is started during excavation. Every change in the geological structure can be considered a risk for preexisting underground structures. Movement control of close by houses is not enough, because it only documents developing damages, but does not inhibit the damage to happen.

Especially naval units are depending on this, because most of the larger navies do own submarines in their fleets, part time operating below water level.

Due to that reason, serious geological interventions should be prohibited in the direct surrounding of army zones and especially in the surrounding of naval forces. This needs to be actively addressed in the planning of the security of the zone.

But secondly also military zones do provide an additional risk for civilian life, especially children and animals. Often army structures are located over decades, sometimes centuries, at the same place. Therefore the weapons and the ammunition, locally used, are changing over time due to technical development. Until today lead and depleted uranium are components in military ammunition. Mod-

ern studies show, that these metals remain long-term in the soil. This is critical for the civilian population. Lead uptake in children and animals happens via the soil. Therefore geotoxicological testing on a random basis is inadequate and might conceal locally critical high levels of these metals.

Especially the dredging is enlarging the risk for the distribution of lead. The safely hidden and not moved toxic areas are dug up and additionally distributed by the building action, the rain and snow.

Nowadays environmental standards do recommend the renaturation of unused army grounds due to this reason. Over the decades of use, it is often not possible to be sure, which ammunition was shot at what times and where.

Especially children under the age of 5 are endangered for the development of life long symptoms due to intoxications with this neurotoxin. But also other organs as kidneys, the heart and the lung might be lifelong damaged in children. This needs to be into consideration during planning for the protection of the civilian population.

### **2.7. Special need for special times – Complex Camp Structures**

Often army zones develop additional special needs in times

of crisis. The structure must be prepared for times of different needs. War divides nations in enemies and allies. Often additional space is required to setup complex military camp structures of allies and support forensic and first aid units in the attacked countries. This produces requirements. Large army structures need to be setup close to routes where traffic on land, on sea and through air is possible. Crisis produces high demands for traffic volumes. Additionally a connection to civil structures should be possible, through the hundreds of additional humans.

In times of crisis it is often overseen, that transport, logistics and supply do require security as all supporting units. If the conflict is taking place in the east, secure routes will be going through the west, depending on the geographical situation and vice versa in an attack from the west. The contrary side of the country is highly relevant, although too easy neglected in the planning for war structures.

### **2.8. Traffic connections – via land, sea and air**

Another point are the traffic connections of military zones. Military units operate on land, on sea and in the air. Not writing about space in this article. However, a military structure with a sea connection and in close proximity to allies must be valued.

In industrial times of constant technical weapons development, natural structures like islands might produce additional security against torpedoes and UUVs (unmanned underwater vehicles).

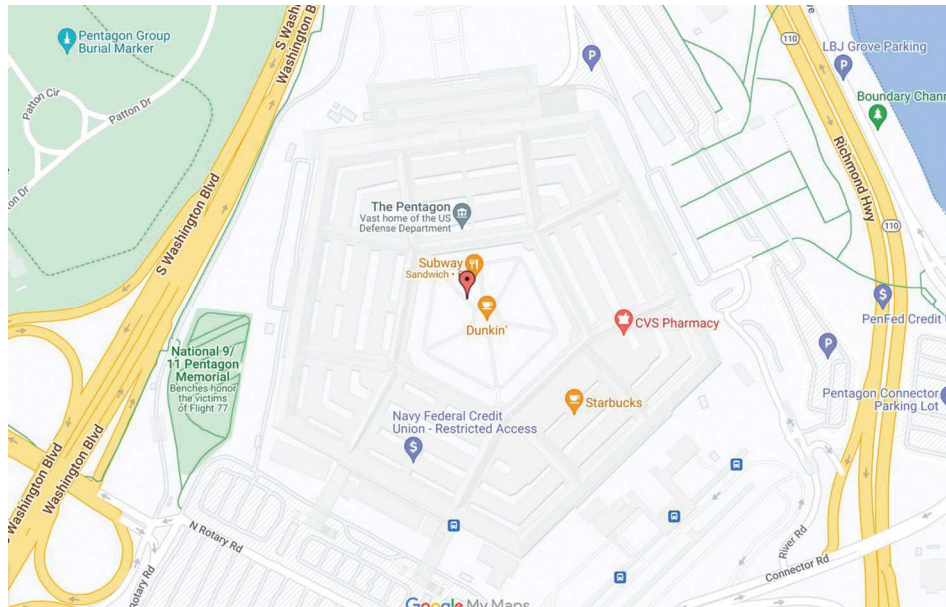
The more connection possibilities an army zone has, the higher is its value for complex crisis logistics and additional for the compensation of damaged transport ways, which might be necessary to be replaced due to destruction. Army zones with more than one connection possibility (e.g. via land and sea) and the possibility of providing additional secured space for complex camp structures must be rated with the highest worth for a nations security.

## **3. EXAMPLES OF STRUCTURAL RESILIENCE IN NAVAL HEADQUARTERS**

The above factors are known for decades as a look around shows. This being demonstrated by three examples:

3.1. The Pentagon in Arlington Virginia – shows clearly security structures through the distances produced by the parking spaces in the surrounding and a good traffic connectivity in all directions and all sides. The close-by area is protected and good distances create resilience. This building was planned around 1941. It was aimed in the





Picture 1 — Pentagon

terror attacks from 9.11.2001 (Picture 1).

3.2. Muskö base in Sweden – The Swedish naval HQ underground located at the east coast of Sweden. It was reactivated in 2019 and returned to reuse in 2021. Providing a large underground structure for naval use. Here the other traffic concept can be seen clearly. The street towards the base is mandatory, but also easy to be controlled. Muskö base was rent for many years prior to the reactivation, but the security structures in the surrounding, where not abolished during that time (Picture 2).

3.3. Whale Island in Portsmouth – Home of the Navy HQ of GB, which also demonstrated the security measures easily.

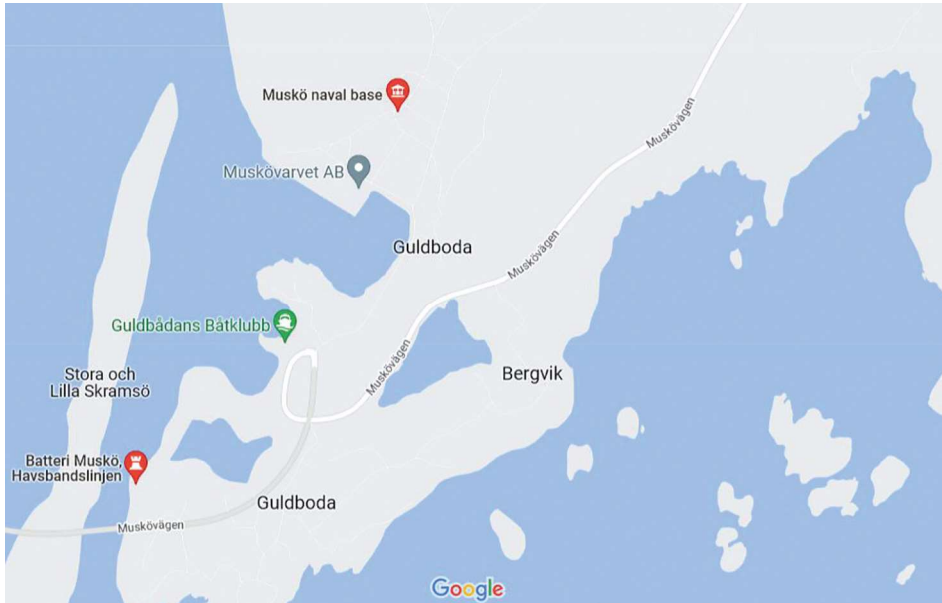
Here is the same situation in the traffic planning, as could be seen in the Muskö base. The mandatory driveway is easy to be controlled until the M275 is reached and the traffic is distributed into different directions (Picture 3).

All areas do provide distance to civilian structures and the surroundings are protected.

#### 4. CURRENT SITUATION IN FINLAND

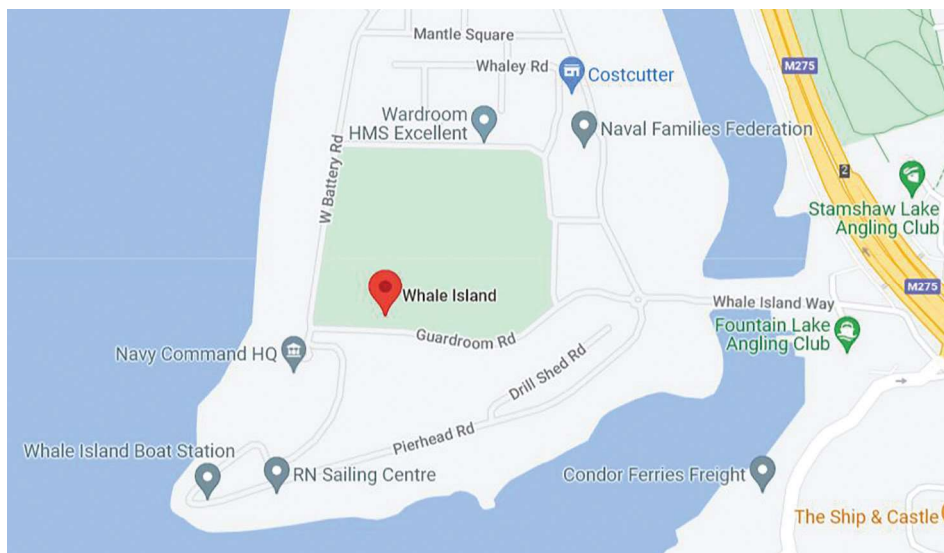
Finland is geopolitical located at the east side in the northern part of the European Union. It is a member of the European Union and it gained independency in 1917.

The naval HQ is located at the Heikkilän kasarmi, where also logistic units of the Finnish army are located. It is sta-



Picture 2 — Muskö.

tioned in Turku, which is a harbor city and additional provides the shortest sea way through the skerry area between Sweden and Finland (Picture 4 – under use of Oddvlar3, CC BY-SA 4.0, via Wikimedia Commons) Finland borders the complete northern part



Picture 3 — Whale Island





Picture 4 — Byer i Finskebukta with Turku

of the Gulf of Finland and therefore is crucial for the sea way to Saint Petersburg in Russia. Although Finland is a nation with only 5 million population, it is geostrategic highly relevant due to its geographical location.

Currently there are only a few single family homes build close to the Navy HQ, MERIVE (Merivoimien Esikunta). The Rykmentintie, which is the official address of this site is a mandatory driveway between the Vähäheikkiläntie and the Uittamontie.

This army zone is equipped with caves. Those are still in strategic use. The ground is clay soil. The vast majority of the streets in the surrounding is closed for heavy traffic due to its geological structures and the known movement of the ground. The only passage open for heavy load is the street towards the army zone, due to its needs of truck movement.

Currently this area shows the characteristics of being secured and a resilient planning. The traffic is kept low. There are no boardwalks in this part of the street. Additional to the land and sea entries

of this area, there exists a close by airport (IATA-Code TKU). It is equipped for the landings of larger planes and free flight slots are easily available, so that in times of crisis the traffic can be heavily increased. This area provides traffic connections via land, sea and air. It is also good connected to the motorway to Helsinki.

But this all is to be endangered, not by an enemy, but by city planning, foreign money and politics.

##### 5. PROJECT PIHLAJANIEMI IN TURKU – SELLING THE NAVY'S SECURITY TO FOREIGNERS

In 2021 the city of Turku announced the building of a new living area directly at the naval HQ, in a distance of less than 10 m to the mandatory driveway at the Rykmentintie (Regimentsstreet) between Vähäheikkiläntie (Street of Vähäheikkilä) and the Uittamontie (Street to Uittamo). It is planned to encase the complete mandatory street with high towered buildings and to sell the complete training grounds to foreign investors and foreign building companies. The resilience and the security will be lost and any control over this area will be gone. 5000 people are supposed to live there, with the building of a kindergarten and a school in direct locational contact to the Navy HQ.

Picture 5 shows an overview over the planned building area. Red is the area, which is planned



Picture 5 — Overview of planned area

to be built with high towering flats. The green area is the army zone, which includes the national navy HQ, a part of the army logistics, strategically used caves and is equipped with water entrances. Yellow is the mandatory driveway of the Regimentsstreet, blue is the sea. The grey areas are other existing areas of the city of Turku. The areas to the right of the Regimentsstreet (yellow) are closed to heavy load traffic due to geological reasons.

Additionally, the traffic is planned to be converted for recreational activities, thus adding boardwalks, bicycle ways and bus lanes to the narrow street. Crucial is, that this street cannot be enlarged in the critical part due to rock formations and preexisting buildings.

The city of Turku, is currently selling all free spots and even

building in their parks. In these days there are more than 1800 free flats available on the market. This number is a lot in relation to the amount of population living in Turku. There is no need to sell critical infrastructure to foreign investors. Several large building areas are currently already in construction in other places of the city.

The investors for this project are unknown. The building companies are owned outside Finland. This planning has been widely criticized as being investor interest based, which was officially stated by the consultant of the city on the 25.10.2021 toward the citizens of the Rykmentintie (Regiments street).

Evacuation plans do not exist. 7-floored buildings are planned directly at the street, providing a good overview and attack and espionage possibility, without a perpetrators visibility in times of attack. The traffic upon the street is planned to increase heavily, additional a kindergarten and a school are planned in the direct surrounding of the army structure. According to the Rome Statute of the International Criminal Court (ICC) Art. 8 Paragraph. 2 b) iv) this area will not be secured, due its local position in a distance of less than 50 m to the national navy HQ. If this area comes under attack, the deaths of this area will be by international law collateral damage.

The surrounding area, which is equipped to build complex camp structures, will be gone. The Non-Fly-Zone for UAV will lose its meaning, because from high towered houses it is easy to photography with high resolution, photographic equipment. A drone will not provide any advantage, when it is possible to compensate height through using high towered buildings. The NFZ for UAV will become an absurdity on paper, not providing anything for the security of the national navy HQ. Additional it will be possible to oversee the complete army zone and its entrances through land and sea. Taking away the secure entering possibilities of this area and making it easy to document the movements in this area.

Making espionage easy, being performed at the kitchen table of a flat. Even the possibilities for attacks are simplified, shooting e. g. an RPG-7 from the roof, it only will require to take two steps backwards, to be invisible for the spectators on the ground.

All above security measures and with that the resilience of this area will be destroyed and gone.

From the earliest point, when this planning became public, these plans were criticized.

In July of 2021 the author of this article wrote to the president, being the commander-in-chief of the Finnish Defense Forces. It was written that the security levels should be uphold,

because crisis may develop and might make an application for Finland to join NATO necessary. The answer was staggering. The office of the President was not informed about the units stationed there and thought, that this area only consisted of the old historical buildings. The office of the president did not know, where the Finnish Navy HQ was.

### CONCLUSION

Finnish politics currently wish to abandon the security of the national navy headquarter and the departments of army logistic, which is critical in these times of war in Europe. Thinking that there is no need for a basic security and that all security can be bought by investing e. g. into short ranged C-RAM systems like the iron dome is short sighted and dangerous. Eleven year old technology might protect a part of the civilians, but the largest protection, which can be provided, is not to risk endangered military structures.

In October 2022 it was announced that in the future, all military zones do become a security belt, like it was planned in the Pentagon plans from 1941. But this is not planned for the National Navy HQ. So Finland is a country where simple barracks with only a land entrance are better protected than the national navy HQ with entrances via land and sea and also equipped with caves in strategic uses.

Those countries who understand, that they have to protect the national defense forces, do understand that the national defense forces are themselves the protection of the nation itself.

Commercial shopping on the weapons market is not an adequate way to compensate the primary security of important army zones. No buying of technical equipment, no signing of technical contracts, no weapons can secure an army zone more, than a secure planning for resilience and safety within the structures and its surroundings.

Nobody would come to the idea, to sell the ground inside the Pen-

tagon or the Pentagons parking places to unknown, foreign investors for the building of flats to be sold on the free market. But Finland does. This decision is wrong and Project Pihlajaniemi needs to be stopped for these reasons. For the safety of Finland and for the safety of Europe.

In earlier times the enemies of combat were located in the opposing countries of conflict. Nowadays a new form of enemy has developed: city planning, foreign investors and intentional unknowing politicians are endangering countries with a less developed consciousness for army needs. They are: The enemy within.

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